

This listing of claims will replace all prior versions, and listings, of claims in the application.

### Listing of Claims

Claims 1- 12 (cancelled).

Claim 13 (currently amended): A method for constructing an inductive write structure for use in a magnetic data recording system, comprising:

forming a first magnetic pole of a magnetic material;

depositing a first insulation layer;

depositing a layer of dielectric write gap material;

forming an electrically conductive coil;

depositing a second insulation layer;

curing said second insulation layer;

~~sputter depositing~~ forming a thin layer of high magnetic moment material, ~~by sputter~~

depositing a lamina of FeXN, X being selected from the group of materials consisting of Rh, Ta, Al, Ti, and Zr, and sputter depositing a lamina of a cobalt based ferromagnetic amorphous alloy;

masking the thin layer of high magnetic moment material in a pattern corresponding to

~~patterning~~ a second pole;

plating a magnetic material in the pattern of said second pole; and

performing a first ion milling process, to remove at least a portion of the sputtered, high magnetic moment material not covered by the plated second pole.

Claim 14 (currently amended): The method of claim 13, further comprising, after forming the first magnetic pole:

~~sputter depositing~~ forming a layer of a high magnetic moment material onto said first pole;

masking the high magnetic moment material ~~sputter deposited~~ formed onto the first pole in a pattern corresponding to a pedestal to be formed on an end of the first pole; and

etching to remove said sputter deposited high magnetic moment material not covered by said mask to form said pedestal.

Claim 15 (previously presented): The method of claim 14, further comprising:

depositing a mask on said plated magnetic material forming said second pole, said mask  
being disposed at an end of said second pole;

performing a second ion milling process to remove a portion of said second pole at said  
end;

performing a reactive ion etching process to remove a portion of said dielectric write gap  
material layer; and

performing a third ion milling process to remove a material from said pedestal.

Claim 16 (previously presented): The method of claim 14, further comprising, following  
depositing the first insulation layer, polishing said first insulation layer using a chemical  
mechanical polishing process.

Claim 17 (canceled)

Claim 18 (canceled)

Claim 19 (currently amended): The method of claim ~~[[18]]~~ 13 wherein depositing the cobalt based  
ferromagnetic amorphous alloy comprises depositing  $\text{Co}_{90}\text{Zr}_9\text{Cr}$ .

Claim 20 (canceled)

Claim 21 (currently amended): The method of claim ~~[[17]]~~ 13 wherein depositing ~~[[FeXn]]~~ FeXN  
comprises depositing Rh.

Claim 22 (currently amended): The method of claim ~~[[17]]~~ 13 wherein depositing ~~[[FeXn]]~~ FeXN  
comprises depositing Ta.

Claim 23 (currently amended): The method of claim ~~[[17]]~~ 13 wherein depositing ~~[[FeXn]]~~ FeXN  
comprises depositing Al.

Claim 24 (currently amended): The method of claim ~~[[17]]~~ 13 wherein depositing ~~[[FeXn]]~~ FeXN comprises depositing Ti.

Claim 25 (currently amended): The method of claim ~~[[17]]~~ 13 wherein depositing ~~[[FeXn]]~~ FeXN comprises depositing Zr.

Claim 26 (previously presented): The method of claim 13 wherein plating the second pole magnetic material comprises plating a Ni-Fe alloy.

Claim 27 (previously presented): The method of claim 13 wherein plating the second pole magnetic material comprises plating to a material thickness about 2um.

Claim 28 (canceled)

Claim 29 (canceled)

Claim 30 (canceled)

Claim 31 (previously presented): The method of claim 14 wherein ~~sputter depositing the~~ forming the thin layer of high magnetic moment material ~~onto the first pole~~ comprises sputter depositing Rh.

Claim 32 (previously presented): The method of claim 14 wherein ~~sputter depositing the~~ forming the thin layer of high magnetic moment material ~~onto the first pole~~ comprises sputter depositing Ta.

Claim 33 (previously presented): The method of claim 14 wherein ~~sputter depositing the~~ forming the thin layer of high magnetic moment material ~~onto the first pole~~ comprises sputter depositing Al.

Claim 34 (previously presented): The method of claim 14 wherein ~~sputter depositing the~~ forming the thin layer of high magnetic moment material ~~onto the first pole~~ comprises sputter depositing Ti.

Claim 35 (previously presented): The method of claim 14 wherein ~~sputter depositing the~~ forming the thin layer of high magnetic moment material ~~onto the first pole~~ comprises sputter depositing Zr.

Claim 36 (previously presented): The method of claim 14 wherein ~~sputter depositing the~~ forming the thin layer of high magnetic moment material ~~onto the first pole~~ comprises depositing at least one lamina of a high magnetic moment material and at least one lamina of a non-magnetic, dielectric material.

Claim 37 (previously presented): The method of claim 14 wherein ~~sputter depositing the~~ forming the thin layer of high magnetic moment material ~~onto the first pole~~ comprises depositing at least one lamina of FeXN, wherein X is selected from the group of materials consisting of Rh, Ta, Al, Ti and Zr, and at least one lamina of a non-magnetic, dielectric material.

Claim 38 (previously presented): The method of claim 14 wherein ~~sputter depositing the~~ forming the thin layer of high magnetic moment material ~~onto the first pole~~ comprises depositing at least one lamina of a high magnetic moment material and at least one lamina of a cobalt based amorphous ferromagnetic alloy.

Claim 39 (previously presented): The method of claim 14 wherein ~~sputter depositing the~~ forming the thin layer of high magnetic moment material ~~onto the first pole~~ comprises depositing at least one lamina of a high magnetic moment material and at least one lamina of Co<sub>90</sub>Zr<sub>9</sub>Cr.

Claim 40 (previously presented): The method of claim 14 wherein ~~sputter depositing~~ forming the high magnetic moment material onto the first pole comprises sputter depositing FeXN, X being selected from the group of materials consisting of Rh, Ta, Al, Ti, and Zr.

Claim 41 (currently amended): The method of claim 40 wherein ~~sputter depositing~~ forming the

high magnetic moment material onto the first pole comprises sputter depositing a lamina of  $[[\text{FeXn}]] \text{FeXN}$ , and further comprises depositing a lamina of a cobalt based ferromagnetic amorphous alloy.

Claim 42 (currently amended): The method of claim 40 wherein ~~sputter depositing~~ forming the high magnetic moment material onto the first pole further comprises depositing a lamina of  $\text{Co}_{90}\text{Zr}_9\text{Cr}$ .

Claim 43 (currently amended): The method of claim 40 wherein ~~sputter depositing~~ forming the high magnetic moment material onto the first pole comprises depositing Rh.

Claim 44 (currently amended): The method of claim 40 wherein ~~sputter depositing~~ forming the high magnetic moment material onto the first pole comprises depositing Ta.

Claim 45 (currently amended): The method of claim 40 wherein ~~sputter depositing~~ forming the high magnetic moment material onto the first pole comprises depositing Al.

Claim 46 (currently amended): The method of claim 40 wherein ~~sputter depositing~~ forming the high magnetic moment material onto the first pole comprises depositing Ti.

Claim 47 (currently amended): The method of claim 40 wherein ~~sputter depositing~~ forming the high magnetic moment material onto the first pole comprises depositing Zr.

Claim 48 (currently amended): The method of claim 14 wherein forming said pedestal comprises forming a laminate comprising at least one lamina of a high magnetic moment material and at least one lamina of a non-magnetic, dielectric material.

Claim 49 (currently amended): The method of claim 14 wherein forming said pedestal comprises forming a laminate comprising at least one lamina of  $\text{FeXN}$ , wherein X is selected from the group of materials consisting of Rh, Ta, Al, Ti and Zr, and at least one lamina of a non-magnetic, dielectric material.

Claim 50 (currently amended): The method of claim 14 wherein forming said pedestal comprises forming a laminate comprising at least one lamina of a high magnetic moment material and at least one lamina of a cobalt based amorphous ferromagnetic alloy.

Claim 51 (currently amended): The method of claim 14 wherein forming said pedestal comprises forming a laminate comprising at least one lamina of a high magnetic moment material and at least one lamina of  $\text{Co}_{90}\text{Zr}_9\text{Cr}$ .

Claim 52 (new): The method of claim 13, further comprising:

depositing a mask on said plated magnetic material forming said second pole, said mask being disposed at an end of said second pole;

performing a second ion milling process to remove a portion of said second pole at said end;

performing a reactive ion etching process to remove a portion of said dielectric write gap material layer; and

performing a third ion milling process to remove a material from said pedestal.

Claim 53 (new): The method of claim 13, further comprising, following depositing the first insulation layer, polishing said first insulation layer using a chemical mechanical polishing process.